

BALDOR® • RELIANCE 

Product Information Packet

VEM3545-5

1HP,3450RPM,3PH,60HZ,56C,3516M,TEFC,F1,N

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL509	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	35A013	Layout:	35LYA013	Poles:	02	Created Date:	03-01-2016
Base:	N	Eff. Date:	07-28-2020	Leads:	3#18		

Specs			
Catalog Number:	VEM3545-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	K
Frame:	56C	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	1.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3516M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	85
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	1.100 A @ 575.0 V	Shaft Ground Indicator:	No Shaft Grounding

Design Code:	B	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger
Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Direct on line
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	F	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	VEM3545-5									
SPEC.	35A013L509G1									
HP	1									
VOLTS	575									
AMP	1.1									
RPM	3450									
FRAME	56C					HZ	60		PH	3
SER.F.	1.25			CODE	K	DES	B		CL	F
NEMA-NOM-EFF	77			PF	85					
RATING	40C AMB-CONT									
CC	010A					USABLE AT 208V				
DE	6205				ODE	6203				
ENCL	TEFC			SN						
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										
	SFA 1.3									

Parts List		
Part Number	Description	Quantity
SA316430	SA 35A013L509G1	1.000 EA
RA303999	RA 35A013L509G1	1.000 EA
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GR SR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LB1119N	WARNING LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3083	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 61758

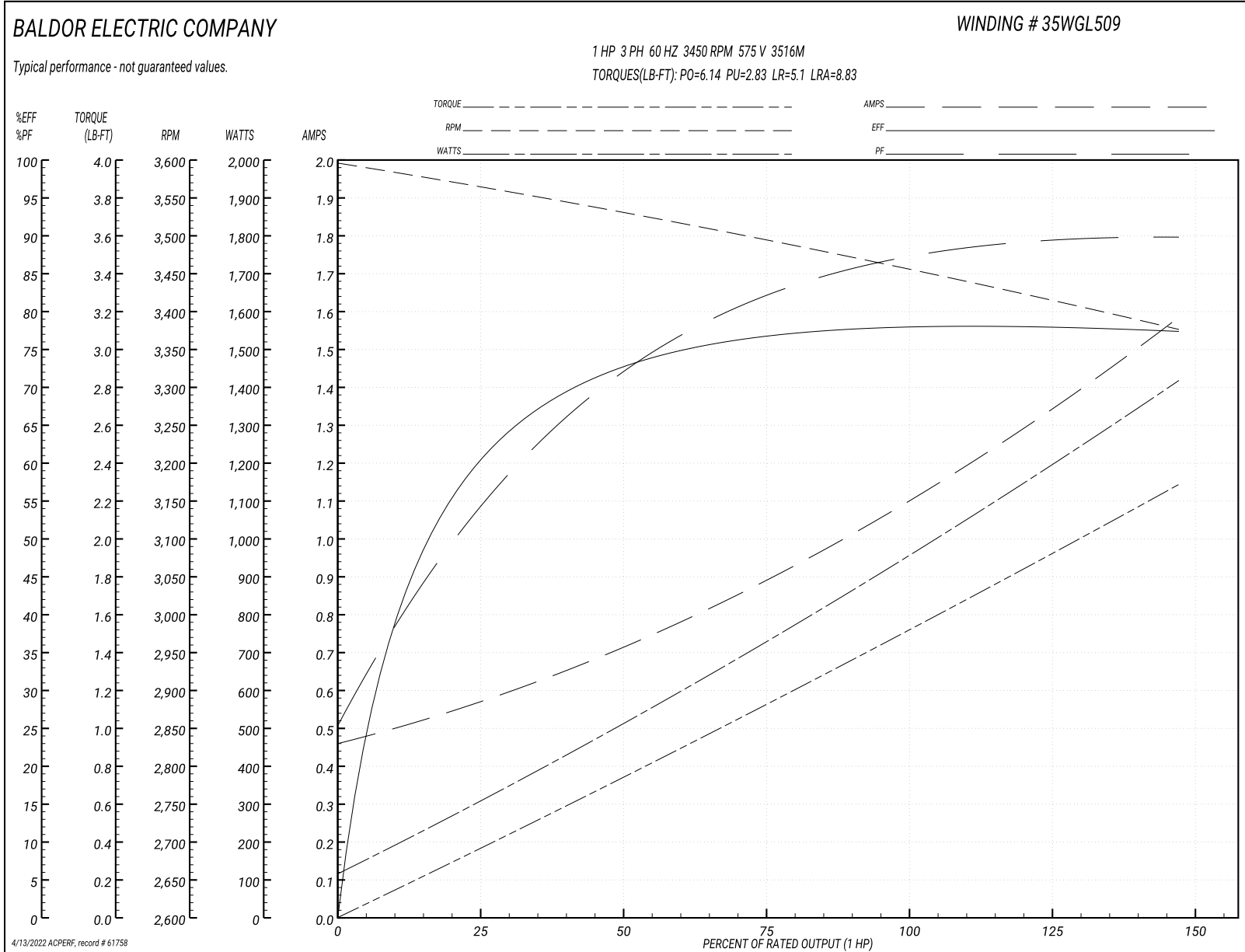
Typical performance - not guaranteed values

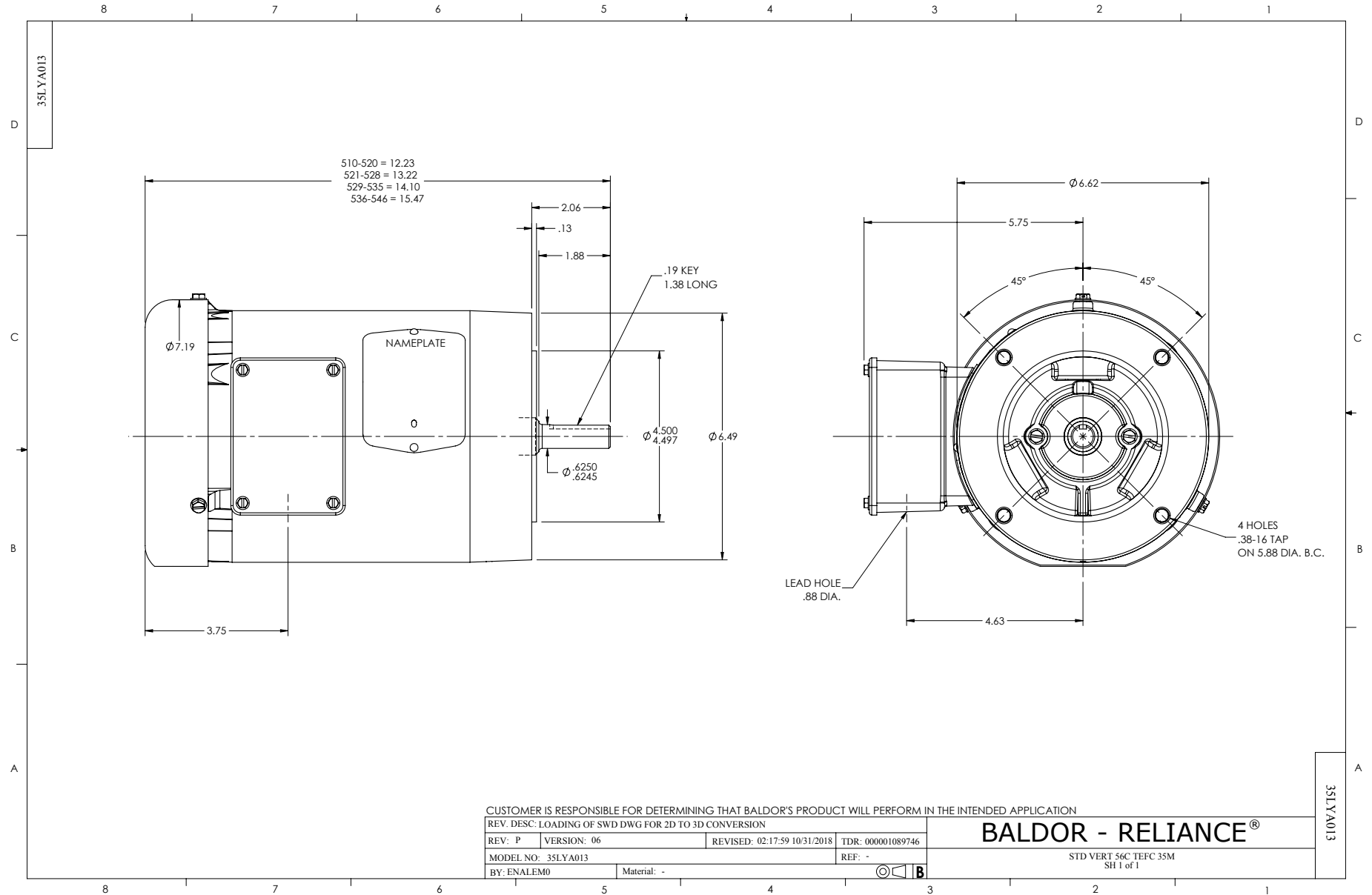
Winding: 35WGL509-R002		Type: 3516M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	1	Full Load Torque	1.47 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	1.1	Breakdown Torque	6.14 LB-FT		
R.P.M.	3450	Pull-up Torque	2.83 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	5.1 LB-FT	
NEMA Design Code	B KVA Code	K	Starting Current	8.83 A	
Service Factor (S.F.)	1.25	No-load Current	0.471 A		
NEMA Nom. Eff.	77 Power Factor	85	Line-line Res. @ 25°C	24.3 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	38°C		
S.F. Amps	1.3	Temp. Rise @ S.F. Load	47°C		
		Locked-rotor Power Factor	59.6		
		Rotor inertia	0.0443 LB-FT ²		

Load Characteristics 575 V, 60 Hz, 1 HP

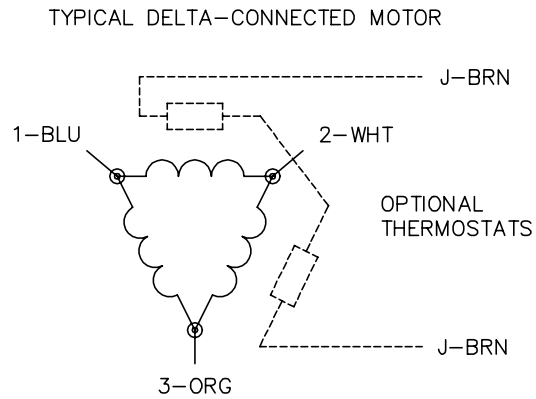
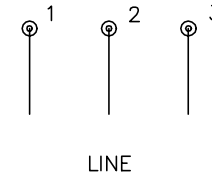
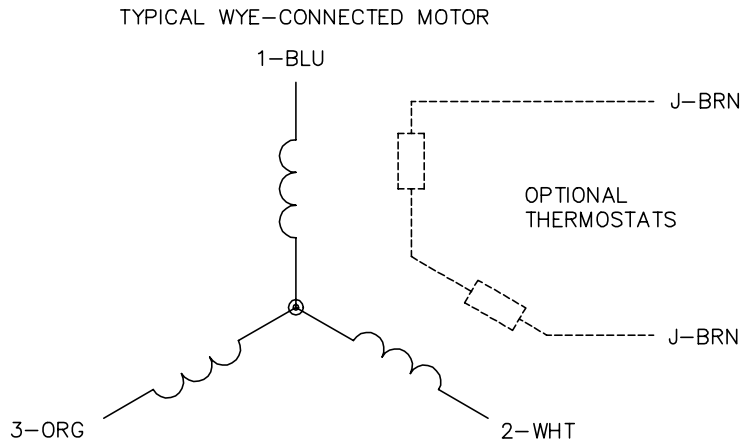
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	71	81	85	89	90	89
Efficiency	57.9	71.2	76.3	78.1	78.5	77.2	78.5
Speed	3564	3534	3501	3462	3423	3374	3423
Line amperes	0.547	0.682	0.862	1.09	1.31	1.58	1.31

Performance Graph at 575V, 60Hz, 1.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1